

Montana Department of Natural Resources and Conservation  
Water Resources Division  
Water Rights Bureau

**ENVIRONMENTAL ASSESSMENT**  
**For Routine Actions with Limited Environmental Impact**

**Part I. Proposed Action Description**

1. Applicant/Contact name and address: BRAND ROCK RANCH  
c/o CHARLES D. KING  
734 INDIAN TRAIL  
BILLINGS, MT 59105-2751
2. Type of action: Application to Change an Existing Irrigation Water Right
3. Water source name: Musselshell River
4. Location affected by project: 34.6 Acres in the SE Sec. 5, T7N, R25E, Musselshell County
5. Narrative summary of the proposed project, purpose, action to be taken, and benefits: The Applicant proposes to change the point of diversion from the headgate to the Naderman Ditch to a pump site downstream on the Musselshell River. The headgate to the Naderman Ditch was destroyed by a floor in 2011. The DNRC shall issue a change authorization if an applicant proves the criteria in 85-2-402 MCA are met.
6. Agencies consulted during preparation of the Environmental Assessment:  
(include agencies with overlapping jurisdiction)

Montana Department of Natural Resources & Conservation (DNRC)  
Montana Natural Heritage Program  
Montana Department of Fish Wildlife & Parks (FWP)  
Montana Department of Environmental Quality (DEQ)  
USDA – Natural Resources Conservation Service (NRCS)  
DOI – U.S. Fish & Wildlife Service (USFWS)

**Part II. Environmental Review**

**1. Environmental Impact Checklist:**

**PHYSICAL ENVIRONMENT**

**WATER QUANTITY, QUALITY AND DISTRIBUTION**

**Water quantity** - Assess whether the source of supply is identified as a chronically or periodically dewatered stream by DFWP. Assess whether the proposed use will worsen the already dewatered condition.

*Determination:* Beneficial.

The Musselshell River from Deadman's Basin to the mouth is on FWP's list of chronically or periodically dewatered streams. This project will change the location the water is diverted to a location downstream approximately 4.8 miles from the historical point of diversion. The proposed change will decrease volume of water removed from the Musselshell River.

**Water quality** - Assess whether the stream is listed as water quality impaired or threatened by DEQ, and whether the proposed project will affect water quality.

*Determination:* No Impact.

Musselshell River from Deadman's Basin Supply Canal to HUC boundary near Roundup, which encompasses the historical point of diversion, proposed point of diversion, and place of use, has been assigned use class C-3 by DEQ. These are waters classified as supporting beneficial use for recreation and non-salmonid aquatic life and fishes, and marginal support for beneficial use for drinking water, agriculture, and industry. This proposed change should not cause any alteration in the water quality of the Musselshell River.

**Groundwater** - Assess if the proposed project impacts ground water quality or supply. If this is a groundwater appropriation, assess if it could impact adjacent surface water flows.

*Determination:* No Impact.

This application does not include a groundwater component.

**DIVERSION WORKS** - Assess whether the means of diversion, construction and operation of the appropriation works of the proposed project will impact any of the following: channel impacts, flow modifications, barriers, riparian areas, dams, well construction.

*Determination:* No Impact.

The proposed diversion is already in place and in operation. There will be no negative impact to channel, flow, barriers, riparian areas, dams or well construction.

#### **UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES**

**Endangered and threatened species** - Assess whether the proposed project will impact any threatened or endangered fish, wildlife, plants or aquatic species or any "species of special concern," or create a barrier to the migration or movement of fish or wildlife. For groundwater, assess whether the proposed project, including impacts on adjacent surface flows, would impact any threatened or endangered species or "species of special concern."

*Determination:* No Impact.

The Natural Heritage Program identified the following species of concern and potential species of concern with the project area: Northern Redbelly Dace, Great Blue Heron, Bald Eagle, American White Pelican, Hooded Merganser, Great Plains Toad, Townsend's Big-eared Bat, Spotted Bat, and Spiny Softshell. The proposed change ceases use of a headgate and ditch which

will remove possible fish and aquatic organism entrainment. The proposed change is within an area that is historically and currently irrigated and should create no novel impacts to terrestrial species of concern.

**Wetlands** - *Consult and assess whether the apparent wetland is a functional wetland (according to COE definitions), and whether the wetland resource would be impacted.*

*Determination: No Impact.*

There are no wetlands shown on the USFWS National Wetlands Inventory within the proposed project area. No wetland resources should be impacted due to the proposed change in diversion.

**Ponds** - *For ponds, consult and assess whether existing wildlife, waterfowl, or fisheries resources would be impacted.*

*Determination: No Impact.*

This application does not include a pond.

**GEOLOGY/SOIL QUALITY, STABILITY AND MOISTURE** - *Assess whether there will be degradation of soil quality, alteration of soil stability, or moisture content. Assess whether the soils are heavy in salts that could cause saline seep.*

*Determination: No Impact.*

The NRCS Soil Survey shows Havre-Glendive complex in the place of use which is described as nonsaline to moderately saline, well-drained Alluvial loam, sandy loam and clay loam soils. The proposed point of diversion is above ground and should have no impact on soil quality, stability or moisture content. The soils are not heavy in salts and should not cause saline seep.

**VEGETATION COVER, QUANTITY AND QUALITY/NOXIOUS WEEDS** - *Assess impacts to existing vegetative cover. Assess whether the proposed project would result in the establishment or spread of noxious weeds.*

*Determination: No Impact.*

Existing vegetative cover is irrigated farmland and domestic vegetation. Changing the point of diversion will have no impact on the vegetation in the place of use. Noxious weed management is the primary responsibility of the landowner.

**AIR QUALITY** - *Assess whether there will be a deterioration of air quality or adverse effects on vegetation due to increased air pollutants.*

*Determination: No Impact.*

The proposed new diversion uses an electric pump and should have no negative impact on air quality.

**HISTORICAL AND ARCHEOLOGICAL SITES** - *Assess whether there will be degradation of unique archeological or historical sites in the vicinity of the proposed project if it is on State or Federal Lands. If it is not on State or Federal Lands simply state NA-project not located on State or Federal Lands.*

*Determination: No Impact.*

N/A – Project not located on State or Federal Lands.

**DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AND ENERGY** - *Assess any other impacts on environmental resources of land, water and energy not already addressed.*

*Determination: No Impact.*

There should be no significant impacts on environmental resources of land, water and energy not already addressed.

## HUMAN ENVIRONMENT

**LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS** - *Assess whether the proposed project is inconsistent with any locally adopted environmental plans and goals.*

*Determination: No Impact.*

The proposed project is consistent with NRCS Musselshell River Irrigation Efficiency Project goals and is not inconsistent with any locally adopted environmental plans and goals.

**ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES** - *Assess whether the proposed project will impact access to or the quality of recreational and wilderness activities.*

*Determination: No Impact.*

The proposed project is on private land and should not impact access to or the quality of recreational and wilderness activities.

**HUMAN HEALTH** - *Assess whether the proposed project impacts on human health.*

*Determination: No Impact.*

There should be no significant impacts on human health from the proposed project.

**PRIVATE PROPERTY** - *Assess whether there are any government regulatory impacts on private property rights.*

Yes\_\_\_ No **X** If yes, analyze any alternatives considered that could reduce, minimize, or eliminate the regulation of private property rights.

*Determination: No Impact.*

**OTHER HUMAN ENVIRONMENTAL ISSUES** - *For routine actions of limited environmental impact, the following may be addressed in a checklist fashion.*

*Impacts on:*

(a) Cultural uniqueness and diversity? No Impact.

(b) Local and state tax base and tax revenues? No Impact.

- (c) Existing land uses? No Impact.
- (d) Quantity and distribution of employment? No Impact.
- (e) Distribution and density of population and housing? No Impact.
- (f) Demands for government services? No Impact.
- (g) Industrial and commercial activity? No Impact.
- (h) Utilities? No Impact.
- (i) Transportation? No Impact.
- (j) Safety? No Impact.
- (k) Other appropriate social and economic circumstances? No Impact.

**2. Secondary and cumulative impacts on the physical environment and human population:**

Secondary Impacts None identified.

Cumulative Impacts None identified.

**3. Describe any mitigation/stipulation measures:** None identified.

**4. Description and analysis of reasonable alternatives to the proposed action, including the no action alternative, if an alternative is reasonably available and prudent to consider:** No alternative is reasonably available and prudent to consider. The Naderman Ditch headgate was destroyed in 2011 flooding of the Musselshell River and given that most other irrigators using that diversion method have changed their water rights to pumps on-stream similar to this proposed project, no plans to repair or restore the headgate and ditch have been made. The no action alternative would mean the applicant could no longer utilize their water right for the beneficial use of irrigation.

**PART III. Conclusion**

**1. Preferred Alternative** Authorize the change in point of diversion as proposed if the applicant proves the criteria in 85-2-402 MCA are met.

**2. Comments and Responses**

**3. Finding:**

Yes\_\_\_ No **X**\_\_\_ Based on the significance criteria evaluated in this EA, is an EIS required?

*If an EIS is not required, explain why the EA is the appropriate level of analysis for this proposed action:* No significant impacts were recognized therefore no EIS is required, as defined in ARM 36.2.524.

*Name of person(s) responsible for preparation of EA:*

*Name:* Veronica Corbett

*Title:* Water Resource Specialist

*Date:* July 26, 2023